

UVA COVID-19 MODEL WEEKLY UPDATE



June 17th, 2021

KEY TAKEAWAYS

- This is a shortened weekly report as we celebrate Juneteenth in Virginia.
- Vaccination coverage continues to slowly but steadily increase across VA, but disparities and pockets of low coverage exist.
- Cases continue to decline even as restrictions on vaccinated individuals are lifted.
- The Delta variant, which has ravaged India, is gaining traction in the US and Virginia. Unvaccinated individuals, including those with a previous COVID infection, remain at risk from this variant.

3 per 100k

Average Daily Cases Week Ending June 13, 2021

8 per 100k

Potential Peak Average Fatigued Control Scenario Daily Cases, Week Ending July 25, 2021

12,221

Average Daily 1st Doses June 3, 2021

12,786

Average Daily 2nd Doses June 3, 2021

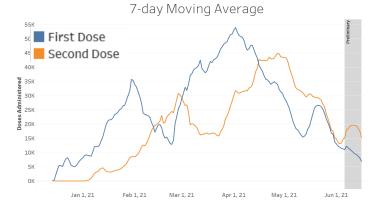
KEY FIGURES

Reproduction Rate (Based on Confirmation Date)

Region	R _e June 15	Weekly Change
Statewide	0.823	0.136
Central	0.909	0.186
Eastern	0.869	0.440
Far SW	0.925	0.003
Near SW	0.707	-0.179
Northern	0.870	0.209
Northwest	0.788	-0.135

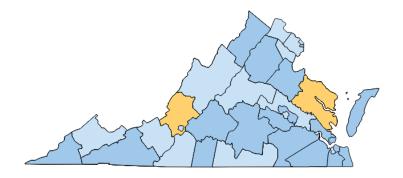
Vaccine Administrations

Average Daily Doses:



Growth Trajectories: 0 Health Districts in Surge

Status	# Districts (prev week)
Declining	19 (23)
Plateau	14 (7)
Slow Growth	2 (4)
In Surge	0 (1)







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THE MODEL

The UVA COVID-19 Model and the weekly results are provided by the UVA Biocomplexity Institute, which has over 20 years of experience crafting and analyzing infectious disease models. It is a (S)usceptible, (E)xposed, (I)nfected, (R)ecovered epidemiologic model designed to evaluate policy options and provide projections of future cases based on the current course of the pandemic.

causing a global pandemic and response.
The model improves as we learn more about it.

THE PROJECTIONS

The UVA team continues to improve the model weekly. The UVA model uses an "adaptive fitting" methodology, where the model traces past and current trends and uses that information to predict future cases at the local level. The model incorporates projections on the impact of vaccines, which will improve over time. Since the B.1.1.7 Variant has become dominant, the model includes increased transmission and severity associated with this Variant of Concern. The model also includes "what-if" or planning scenarios. The "Fatigued Control" scenario identifies the highest transmission rates seen during summer 2020 and projects those forward. The "Delta" scenarios adds the known effects of the Delta Variant of Concern to transmission rates.

MODEL RESULTS

With the B.1.1.7 variant becoming predominant, the model shows a continued decline in new weekly cases along the current course, but warns that case growth could resume as Virginians relax precautions. Under the current course, model scenarios show that cases peaked at 68 average daily cases per 100,000 residents during the week ending January 24th. However, under a worst case scenario, if Virginians relax their behavior for a sustained period as Variants of Concern take hold, cases could reach another smaller peak with 8 average daily cases per 100,000 the week ending July 25th. To lessen the projected peak, we must give vaccines time to have an impact, especially as the B.1.1.7 variant is the predominant strain in Virginia. Do your part to stop the spread. Continue to practice good prevention and get vaccinated when eligible.

